ENVIRONMENTAL SERVICES
SPB05-894P-AA

1. PARTIES

THIS CONTRACT, is entered into by and between the State of Montana, Department of Administration, State Procurement Bureau, (hereinafter referred to as "the State"), whose address and phone number are Room 165 Mitchell Building, 125 North Roberts, PO Box 200135, Helena MT 59620-0135, (406) 444-2575 and **TerraGraphics Environmental Engineering, Inc.**, (hereinafter referred to as the "Contractor"), whose nine digit Federal ID Number, address and phone number are 82-0395020, 121 S. Jackson, Moscow ID 83843, and (208) 882-7858.

THE PARTIES AGREE AS FOLLOWS:

2. PURPOSE

The purpose of this term contract is to establish a list of Environmental Service Providers in several service areas. All qualified offerors will be assembled into a multiple contractor term contract for use by state agencies and other public procurement units. The State makes no guarantee of use by any agency-authorized access to this term contract. However, through data conveyed by the Montana Department of Environmental Quality, Montana Department of Natural Resources and Conservation, and Montana Fish, Wildlife and Parks, it is anticipated that this term contract should access approximately 2.5 million dollars or more annually.

3. EFFECTIVE DATE, DURATION, AND RENEWAL

3.1 Contract Term. This contract shall take effect upon execution of all signatures, and terminate on June 30, 2008, unless terminated earlier in accordance with the terms of this contract. (Mont. Code Ann. § 18-4-313.)

3.2 Contract Renewal. This contract may, upon mutual agreement between the parties and according to the terms of the existing contract, be renewed in one-year intervals, or any interval that is advantageous to the State, for a period not to exceed a total of three additional years. This renewal is dependent upon legislative appropriations.

3.3 Addition of Analytical Laboratory Contractor. Proposals will be accepted between April 1 and May 1 of each calendar year from current firms requesting review of their qualifications to perform Analytical Laboratory Services as originally requested under RFP SPB05-894P. The state will evaluate each proposal received in the exact manner in which the original proposals for other categories were evaluated. If proposal passes the requirements as evaluated to perform Analytical Lab Services, the state will update that firms term contract to include the Analytical Lab Services category contingent on said firm being in good standing otherwise.

4. NON-EXCLUSIVE CONTRACT

The intent of this contract is to provide state agencies with an expedited means of procuring supplies and/or services. This contract is for the convenience of state agencies and is considered by the State Procurement Bureau to be a "Non-exclusive" use contract. Therefore, agencies may obtain this product/service from sources other than the contract holder(s) as long as they comply with Title 18, MCA, and their delegation agreement. The State Procurement Bureau does not guarantee any usage.

5. COOPERATIVE PURCHASING

Under Montana law, public procurement units, as defined in section 18-4-401, MCA, have the option of cooperatively purchasing with the State of Montana. Public procurement units are defined as local or state public procurement units of this or any other state, including an agency of the United States, or a tribal procurement unit. Unless the bidder/offeror objects, in writing, to the State Procurement Bureau prior to the

award of this contract, the prices, terms, and conditions of this contract will be offered to these public procurement units.

6. TERM CONTRACT REPORTING

Term contract holder(s) shall furnish annual reports of term contract usage. Each report shall contain complete information on all public procurement units utilizing this term contract. Minimum information required to be included in usage reports: name of the agency or governmental entity who contacted you regarding a potential project; project title; agency contact person; if the project was not successfully negotiated, state the reason; number and title of contracts received; total dollar amounts for contracts received; the names of your company personnel involved in the project; and project status as of usage report date. The report for this term contract will be due on July 20th of each year.

Reported volumes and dollar totals may be checked by the State Procurement Bureau against State records for verification. Failure to provide timely or accurate reports is justification for cancellation of the contract and/or justification for removal from consideration for award of contracts by the State.

7. COST/PRICE ADJUSTMENTS

7.1 Cost Increase by Mutual Agreement. After the initial term of the contract, each renewal term may be subject to a cost increase by mutual agreement. Contractor must provide written, verifiable justification for any cost adjustments they request during each renewal period. Contractor shall provide its cost adjustments in both written and electronic format.

7.2 Differing Site Conditions. If, during the term of this contract, circumstances or conditions are materially different than set out in the specifications, the Contractor may be entitled to an equitable adjustment in the contract price. The Contractor shall immediately cease work and notify, in writing, the State of any such conditions necessitating an adjustment as soon as they are suspected and prior to the changed conditions affecting the performance of this contract. Any adjustment shall be agreed upon in writing by both parties to the contract.

7.3 Cost/Price Adjustment. All requests for cost/price adjustment must be submitted between April 1st and April 30th along with written justification. Requests received after April 30th will not be considered unless written approval from the SPB Contracts Officer is given to submit at a later date. In no event will cost/price adjustments be allowed beyond May 15th. All requests that are approved will be incorporated by contract amendment and made effective July 1st of the next approved renewal period.

8. SERVICES AND/OR SUPPLIES

8.1 Service Categories. Contractor agrees to provide to the State the following services:

Water Quality Monitoring - Lakes and Streams. As part of the monitoring program, standards criteria and TMDL development, lakes will continue to be sampled collecting chemistry, physical, and habitat parameters. Stream sampling may include sediment and water chemistry, geomorphology, habitat, or sources of pollutants (e.g., pebble counts, channel cross-section, stream reach assessments, photo points, Rosgen Type II, etc GIS and remote sensing may be used to assess riparian habitats, and watershed physical characteristics.

Geographic Information Systems (GIS) Services. The State, and in particular DEQ, will need assessments that characterize a watershed and identify and quantify all probable sources of pollutants. GIS maps will be required for every waterbody that is assessed. Thematic maps may include, but are not limited to: land ownership, land use, topography, hydrology, soils, precipitation, and/or endangered species distribution. In addition, DEQ may request that GIS applications be used to facilitate the interpretation and analysis of digital images and/or other georeferenced data.

DEQ Electronic Data / Information Technical Assistance. The DEQ needs to be able to easily transmit water quality data into the modernized STORET database and make it more accessible to data

consumers and the public. To accomplish this, the DEQ seeks to obtain technical products, services, and support, as needed, to migrate datasets to production database system(s) and improve data flow and data quality from a variety of sources into STORET. These tasks may include, but are not limited to solutions in commonly available software products to generate data that conforms to STORET and Oracle database requirements. Specific service areas sought include, but are not limited to: technical support for data conversion, reformatting, and/or normalization of existing historic and transformed datasets; automated data validation routines or procedures designed to support specific data quality objectives; technical solutions for data entry, data capture, and data reporting, maintenance, upgrades or enhancements to existing software interfaces; technical support in the implementation of STORET; acquisition of STORET-compatible data deliverables.

8.2 Reuse of Documents. When the projects dictate a design or engineered approach, the State agrees that it will not apply the Contractor's designs to any other projects.

9. ENGINEERING ACCESS

All of the firms selected may need to have access to engineering services depending on the nature of the project. The contractor(s) will be expected to use their own best judgment as to whether engineering services are needed for a given project. However, traditional engineering methodologies are not the emphasis of this RFP. It is a violation of State Statute to practice engineering or land surveying without a license.

10. PROJECT SELECTION

10.1 Project Identification. The State will be responsible for identifying projects, contacting landowners and securing necessary permission/cooperation agreements, selecting a contractor, writing grant applications and approving project payments.

10.2 Hazardous Materials. The State will not initiate projects where it is known that hazardous materials are present. If there is an indication of a potential of hazardous materials, then the State will do testing prior to contacting the contractor. However, there is always the possibility of unforeseen problems resulting in the stoppage of a project.

10.3 Meetings. The selected contractor may be required to meet with State personnel at the project site to conduct a site evaluation, discuss project issues and begin the negotiation process on project feasibility, conceptual design and costs for each project.

10.4 Approach Expectations. In the case of restoration activities, the agency will identify the preferred techniques. The determination made by the State may define which contractor(s) are contacted for project initiation. The State is always open to new and innovative approaches that accomplish project goals.

11. SELECTING A CONTRACTOR

The State may select a term contract holder from the Environmental Services contract home page as provided under the state's website address http://www.discoveringmontana.com/doa/gsd/procurement/TermContracts/environservices/Default.asp, taking into consideration such things as the contractor's area of expertise, requirements and location of the project, the contractor's availability and access to resources necessary to efficiently and effectively complete the project, demonstrated excellent past performance on State and public projects, identified subcontractors and total project cost.

General. Ordering agencies shall use the procedures in this section when ordering services priced at hourly rates as established by each Term Contract (TC). The applicable service categories are identified in each TC along with the contractor's price lists.

Request for Quotation (RFQ) procedures. The ordering agency must provide an RFQ, which includes the statement of work and limited, but specific evaluation criteria (*e.g.*, experience and past performance), to TC

contractors that offer services that will meet the agency's needs. The RFQ may be posted to the agency's state website to expedite responses.

Statement of Work (SOWs). All SOW's shall include at a minimum a detailed description of the work to be performed, location of work, period of performance, deliverable schedule, applicable performance standards and any special requirements (e.g., security clearances, travel, special knowledge).

(1) Ordering agency may select a contractor from the appropriate service category and directly negotiate a mutually acceptable project based on a sudden and unexpected happening or unforeseen occurrence or condition, which requires immediate action. (Exigency).

(2) Ordering agency may place orders at or below the $5,000 threshold with any TC contractor that can meet the agency's needs. The ordering agency should attempt to distribute orders among all service category contractors.

(3) For orders estimated to exceed $5,000 but less than $25,000.

(i) The ordering agency shall develop a statement of work.
(ii) The ordering agency shall provide the RFQ (including the statement of work and evaluation criteria) to at least three TC contractors that offer services that will meet the agency's needs.
(iii) The ordering agency shall request that contractors submit firm-fixed prices to perform the services identified in the statement of work.

(4) For orders estimated to exceed $25,000. In addition to meeting the requirements of (3) above, the ordering agency shall:

(i) Provide the RFQ (including the statement of work and the evaluation criteria) to a minimum of six service category TC contractors (if category has less than 6, all contractors will be offered an RFQ) with a 50% replacement factor for each subsequent request for quote in the same service category.

Evaluation. The ordering agency shall evaluate all responses received using the evaluation criteria provided in the RFQ to each TC contractor. The ordering agency is responsible for considering the level of effort and the mix of labor proposed to perform a specific task being ordered, and for determining that the total price is reasonable. The agency will place the order with the contractor that represents the best value. After award, ordering agencies will provide timely notification to unsuccessful TC contractors. If an unsuccessful TC contractor requests information on a task order award that was based on factors other than price alone, a brief explanation of the basis for the award decision shall be provided.

Minimum documentation. The ordering agency shall document:
(1) The TC contractors considered, noting the contractor from which the service was purchased.
(2) A description of the service purchased.
(3) The amount paid.
(4) The evaluation methodology used in selecting the contractor to receive the order.
(5) The rationale for making the selection.
(6) Determination of price fair and reasonableness.

Agency project task orders will be utilized to finalize the project. Only written addenda will be used for adjustments of the task orders and must be signed by both parties. All task orders must contain signatures from both parties and appropriate agency legal review as directed in their procurement policy.

The State will monitor contractor selection by using the information provided in the annual TC usage reports.

Contractor's who fail to respond to three RFQ opportunities within a one-year period between July 1st and June 30th may be removed from the qualified list of contractors.

12. CONTRACTOR RESPONSIBILITIES

12.1 Supervision and Implementation. The selected contractor for an individual project will be responsible for the supervision and implementation of the approach and will be responsible for oversight of work performed by all subcontractors. In most cases the contractor will provide and be responsible for all the necessary equipment, materials, supplies and personnel necessary for proper execution of the work. However, the State reserves the right to hire subcontractors (equipment and/or labor) if it will provide a cost savings to the State. The selected contractor will also be responsible for clean up of the sites if necessary and must have the sites inspected by the State immediately prior to completion.

12.2 On-Site Requirements. When a contractor is contacted by the State to discuss a project, the State and the contractor may visit the job site if deemed necessary by the Project Manager, to become familiar with conditions relating to the project and the labor requirements. The State will provide a detailed scope of work for the project and request the contractor supply the State with a response to project approach, cost, timeframe and any other information deemed necessary by the State to make a selection or complete a contract negotiation.

In the cases of Restoration or On-The-Ground Activities, the contractor shall adequately protect the work, adjacent property, and the public in all phases of the work. They shall be responsible for all damages or injury due to their action or neglect.

The contractor shall maintain access to all phases of the contract pending inspection by the State, the landowner, or their representative. All interim or final products funded by the contract will become the property of the State or Cooperative Purchaser upon payment for said products.

All work rejected as unsatisfactory shall be corrected prior to final inspection and acceptance. The contractor shall respond within seven calendar days after notice of observed defects has been given and shall proceed to immediately remedy these defects. Should the contractor fail to respond to the notice or not remedy the defects, the State may have the work corrected at the expense of the contractor.

12.3 Clean Up (when project tasks require). The contractor shall:

- Keep the premises free from debris and accumulation of waste;
- Clean up any oil or fuel spills;
- Keep machinery clean and free of weeds;
- Remove all construction equipment, tools and excess materials; and
- Perform finishing site preparation to limit the spread of noxious weeds before final payment by the State.

12.4 Applicable Laws. The contractor shall keep informed of, and shall comply with all applicable laws, ordinances, rules, regulations and orders of the City, County, State, Federal or public bodies having jurisdiction affecting any work to be done to provide the services required. The contractor shall provide all necessary safeguards for safety and protection, as set forth by the United States Department of Labor, Occupational Safety and Health Administration.

12.5 Cooperation. The contractor shall work closely with the States analytical consultants, (i.e. environmental laboratories and taxonomists) to develop the desired products.

12.6 Work Acceptance. The contractor is responsible for project oversight as needed. The State may also periodically provide personnel for administrative oversight from the initiation of the contract through project completion. All work will be inspected by the State or designated liaison prior to approval of any contract payments. All work rejected as unsatisfactory shall be corrected prior to final inspection and acceptance. Contractor shall respond within seven calendar days after notice of defects has been given by the State and proceed to immediately remedy all defects.

12.7 Records. The contractor will supply the State with documentation, when requested, of methods used throughout project implementation. Contractor will maintain records for themselves and all subcontractors of supplies, materials, equipment and labor hours expended.

12.8 Communication. Remoteness of project sites may necessitate that the contractor have some form of field communication such as a cellular phone. This communication is necessary to enable the State to respond to public concerns related to the project, accidents, inspections, or other project issues that require immediate feedback. In addition, the State or Cooperative Purchaser may require scheduled communication at agreed upon intervals. The communication schedule will be dependent upon the project circumstances and requirements of the contracting agency. In the case when a communication schedule is included in the Scope of Work, the schedule will commence when the contractor initiates the project.

12.9 Change Of Staffing. Since qualifications of personnel were key in determining which offerors were selected to be on this TC, a written notification of any changes in key personnel must be made to the state agency, prior to entering into negotiations to perform any specific work scope. Contractor shall replace such employee(s) at its own expense with an employee of substantially equal abilities and qualifications without additional cost to the agency. If these staffing changes cause the contractor to no longer meet the qualifications stated herein, that firm will be removed from the service area of this TC. Failure to notify the state agency of staffing changes could result in the contractor being removed from the TC listing and possible suspension from bidding on other state projects.

12.10 Collaboration. The State encourages collaboration between contractors to increase the scope of services offered. In cases where the chosen contractor is not able to provide all services needed for the project, the State will expect the chosen contractor to contact other contractors on this list to negotiate subcontracts for these services before going elsewhere. Exceptions to this strategy will be evaluated on a case-by-case basis.

12.11 Subcontractors, Project Budget and Invoicing. All subcontractors to be used in any project must be approved by the authorized entity initiating the project. Project budgets will be negotiated for each individual project contract. However, all rates, terms and conditions set forth in this term contract will be applied to individual contracts. Subcontractor is defined as anyone other than the prime contractor having substantial direct involvement in a specific project.

The State reserves the right to choose the invoicing method from the following:

- Prime contractor's billing will include the subcontractors charges and payment will be made to the prime, or
- Prime and subcontractors will bill the State separately and the State will pay each directly.

13. CONSIDERATION/PAYMENT

13.1 Payment Schedule. In consideration for the services to be provided, the State shall pay according to the negotiated agreement for each project. Hourly rates and miscellaneous charges as provided in Attachment B shall apply.

13.2 Withholding of Payment. The State may withhold payments to the Contractor if the Contractor has not performed in accordance with this contract. Such withholding cannot be greater than the additional costs to the State caused by the lack of performance.

14. CONTRACTOR WITHHOLDING

Section 15-50-206, MCA, requires the state agency or department for whom a public works construction contract over $5,000 is being performed, to withhold 1 percent of all payments and to transmit such monies to the Department of Revenue.

15. MONTANA PREVAILING WAGE REQUIREMENTS

Unless superseded by federal law, Montana law requires that contractors and subcontractors give preference to the employment of Montana residents for any public works contract in excess of $25,000 for construction or nonconstruction services in accordance with sections 18-2-401 through 18-2-432, MCA, and all administrative rules adopted pursuant thereto. Unless superseded by federal law, at least 50% of the workers of each contractor engaged in construction services must be performed by bona fide Montana residents. The Commissioner of the Montana Department of Labor and Industry has established the resident requirements in

accordance with sections 18-2-403 and 18-2-409, MCA. Any and all questions concerning prevailing wage and Montana resident issues should be directed to the Montana Department of Labor and Industry.

In addition, unless superseded by federal law, all employees working on a public works contract shall be paid prevailing wage rates in accordance with sections 18-2-401 through 18-2-432, MCA, and all administrative rules adopted pursuant thereto. Montana law requires that all public works contracts, as defined in section 18-2-401, MCA, in which the total cost of the contract is in excess of $25,000, contain a provision stating for each job classification the standard prevailing wage rate, including fringe benefits, travel, per diem, and zone pay that the contractors, subcontractors, and employers shall pay during the public works contract.

Furthermore, section 18-2-406, MCA, requires that all contractors, subcontractors, and employers who are performing work or providing services under a public works contract post in a prominent and accessible site on the project staging area or work area, no later than the first day of work and continuing for the entire duration of the contract, a legible statement of all wages and fringe benefits to be paid to the employees in compliance with section 18-2-423, MCA. Section 18-2-423, MCA, requires that employees receiving an hourly wage must be paid on a weekly basis.

Each contractor, subcontractor, and employer must maintain payroll records in a manner readily capable of being certified for submission under section 18-2-423, MCA, for not less than three years after the contractor's, subcontractor's, or employer's completion of work on the public works contract.

The nature of the work performed or services provided under this contract meets the statutory definition of a "public works contract" under section 18-2-401(11)(a), MCA, and falls under the category of Heavy Construction and Nonconstruction services. The booklets containing Montana's 2003 Rates for Heavy Construction and Nonconstruction Services are attached.

The most current Montana Prevailing Wage Booklet will automatically be incorporated at time of renewal. It is the contractor's responsibility to ensure they are using the most current prevailing wages during performance of its covered work.

16. ACCESS AND RETENTION OF RECORDS

16.1 Access to Records. The Contractor agrees to provide the State, Legislative Auditor or their authorized agents access to any records necessary to determine contract compliance. (Mont. Code Ann. § 18-1-118.)

16.2 Retention Period. The Contractor agrees to create and retain records supporting the environmental services for a period of three years after either the completion date of this contract or the conclusion of any claim, litigation or exception relating to this contract taken by the State of Montana or a third party.

17. ASSIGNMENT, TRANSFER AND SUBCONTRACTING

The Contractor shall not assign, transfer or subcontract any portion of this contract without the express written consent of the State. (Mont. Code Ann. § 18-4-141.) The Contractor shall be responsible to the State for the acts and omissions of all subcontractors or agents and of persons directly or indirectly employed by such subcontractors, and for the acts and omissions of persons employed directly by the Contractor. No contractual relationships exist between any subcontractor and the State.

18. HOLD HARMLESS/INDEMNIFICATION

The Contractor agrees to protect, defend, and save the State, its elected and appointed officials, agents, and employees, while acting within the scope of their duties as such, harmless from and against all claims, demands, causes of action of any kind or character, including the cost of defense thereof, arising in favor of the Contractor's employees or third parties on account of bodily or personal injuries, death, or damage to property arising out of services performed or omissions of services or in any way resulting from the acts or omissions of

the Contractor and/or its agents, employees, representatives, assigns, subcontractors, except the sole negligence of the State, under this agreement.

19. REQUIRED INSURANCE

19.1 General Requirements. The Contractor shall maintain for the duration of the contract, at its cost and expense, insurance against claims for injuries to persons or damages to property, including contractual liability, which may arise from or in connection with the performance of the work by the Contractor, agents, employees, representatives, assigns, or subcontractors. This insurance shall cover such claims as may be caused by any negligent act or omission.

19.2 Primary Insurance. The Contractor's insurance coverage shall be primary insurance as respect to the State, its officers, officials, employees, and volunteers and shall apply separately to each project or location. Any insurance or self-insurance maintained by the State, its officers, officials, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

19.3 Specific Requirements for Commercial General Liability. The Contractor shall purchase and maintain occurrence coverage with combined single limits for bodily injury, personal injury, and property damage of $1,000,000 per occurrence and $2,000,000 aggregate per year to cover such claims as may be caused by any act, omission, or negligence of the Contractor or its officers, agents, representatives, assigns or subcontractors.

19.4 Additional Insured Status. The State, its officers, officials, employees, and volunteers are to be covered and listed as additional insureds; for liability arising out of activities performed by or on behalf of the Contractor, including the insured's general supervision of the Contractor; products and completed operations; premises owned, leased, occupied, or used.

19.5 Specific Requirements for Automobile Liability. The Contractor shall purchase and maintain coverage with split limits of $500,000 per person (personal injury), $1,000,000 per accident occurrence (personal injury), and $100,000 per accident occurrence (property damage), OR combined single limits of $1,000,000 per occurrence to cover such claims as may be caused by any act, omission, or negligence of the contractor or its officers, agents, representatives, assigns or subcontractors.

19.6 Additional Insured Status. The State, its officers, officials, employees, and volunteers are to be covered and listed as additional insureds for automobiles leased, hired, or borrowed by the Contractor.

19.7 Specific Requirements for Professional Liability. The Contractor shall purchase and maintain occurrence coverage with combined single limits for each wrongful act of $1,000,000 per occurrence and $2,000,000 aggregate per year to cover such claims as may be caused by any act, omission, negligence of the Contractor or its officers, agents, representatives, assigns or subcontractors. Note: if "occurrence" coverage is unavailable or cost prohibitive, the Contractor may provide "claims made" coverage provided the following conditions are met: (1) the commencement date of the contract must not fall outside the effective date of insurance coverage and it will be the retroactive date for insurance coverage in future years; and (2) the claims made policy must have a three year tail for claims that are made (filed) after the cancellation or expiration date of the policy.

19.8 Deductibles and Self-Insured Retentions. Any deductible or self-insured retention must be declared to and approved by the state agency. At the request of the agency either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the State, its officers, officials, employees, or volunteers; or (2) at the expense of the Contractor, the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claims administration, and defense expenses.

19.9 Certificate of Insurance/Endorsements. A certificate of insurance from an insurer with a Best's rating of no less than A- indicating compliance with the required coverages, has been received by the State Procurement Bureau, PO Box 200135, Helena MT 59620-0135. The Contractor must notify the State immediately, of any material change in insurance coverage, such as changes in limits, coverages, change in status of policy, etc. The State reserves the right to require complete copies of insurance policies at all times.

20. COMPLIANCE WITH THE WORKERS' COMPENSATION ACT

Contractors are required to comply with the provisions of the Montana Workers' Compensation Act while performing work for the State of Montana in accordance with sections 39-71-120, 39-71-401, and 39-71-405, MCA. Proof of compliance must be in the form of workers' compensation insurance, an independent contractor's exemption, or documentation of corporate officer status. Neither the contractor nor its employees are employees of the State. This insurance/exemption must be valid for the entire term of the contract. A renewal document must be sent to the State Procurement Bureau, PO Box 200135, Helena MT 59620-0135, upon expiration.

21. COMPLIANCE WITH LAWS

The Contractor must, in performance of work under this contract, fully comply with all applicable federal, state, or local laws, rules and regulations, including the Montana Human Rights Act, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Any subletting or subcontracting by the Contractor subjects subcontractors to the same provision. In accordance with section 49-3-207, MCA, the Contractor agrees that the hiring of persons to perform the contract will be made on the basis of merit and qualifications and there will be no discrimination based upon race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability, or national origin by the persons performing the contract.

22. INTELLECTUAL PROPERTY

All patent and other legal rights in or to inventions created in whole or in part under this contract must be available to the State for royalty-free and nonexclusive licensing. Both parties shall have a royalty-free, nonexclusive, and irrevocable right to reproduce, publish or otherwise use and authorize others to use, copyrightable property created under this contract.

23. PATENT AND COPYRIGHT PROTECTION

23.1 Third Party Claim. In the event of any claim by any third party against the State that the products furnished under this contract infringe upon or violate any patent or copyright, the State shall promptly notify Contractor. Contractor shall defend such claim, in the State's name or its own name, as appropriate, but at Contractor's expense. Contractor will indemnify the State against all costs, damages and attorney's fees that accrue as a result of such claim. If the State reasonably concludes that its interests are not being properly protected, or if principles of governmental or public law are involved, it may enter any action.

23.2 Product Subject of Claim. If any product furnished is likely to or does become the subject of a claim of infringement of a patent or copyright, then Contractor may, at its option, procure for the State the right to continue using the alleged infringing product, or modify the product so that it becomes non-infringing. If none of the above options can be accomplished, or if the use of such product by the State shall be prevented by injunction, the State will determine if the Contract has been breached.

24. CONTRACT TERMINATION

24.1 Termination for Cause. The State may, by written notice to the Contractor, terminate this contract in whole or in part at any time the Contractor fails to perform this contract.

24.2 Reduction of Funding. The State, at its sole discretion, may terminate or reduce the scope of this contract if available funding is reduced for any reason. (See Mont. Code Ann. § 18-4-313(3).)

25. STATE PERSONNEL

25.1 State Contract Manager. The State Contract Manager identified below is the State's single point of contact and will perform all contract management pursuant to section 2-17-512, MCA, on behalf of the State. Written notices, requests, complaints or any other issues regarding the contract should be directed to the State Contract Manager.

The State Contract Manager for this contract is:

Robert Oliver, Contracts Officer
Room 165 Mitchell Building
125 North Roberts
PO Box 200135
Helena MT 59620-0135
Telephone #: (406) 444-0110
Fax #: (406) 444-2529
E-mail: roliver@mt.gov

25.2 State Project Manager. Each using State agency or Cooperative Purchaser will identify a Project Manager in the project task order. The Project Manager will manage the day-to-day project activities on behalf of the State/Cooperative Purchaser.

26. CONTRACTOR PERSONNEL

26.1 Change Of Staffing. Since qualifications of personnel was key in determining which offerors were selected to be on this term contract list, a written notification to the State Procurement Bureau of any changes of key personnel must be made within two weeks of the change. These change notifications will be completed upon the departure or hiring of key personnel who are professional employees critical to awarded service areas. If these staffing changes cause the firm to no longer meet the qualifications stated herein, that firm will be removed from the service area of this term contract. Failure to notify the State Procurement Bureau of staffing changes could result in the contractor being removed from the term contract listing and possible suspension from bidding on other State projects.

26.2 Contractor Contract Manager. The Contractor Contract Manager identified below will be the single point of contact to the State Contract Manager and will assume responsibility for the coordination of all contract issues under this contract. The Contractor Contract Manager will meet with the State Contract Manager and/or others necessary to resolve any conflicts, disagreements, or other contract issues.

The Contractor Contract Manager for this contract is:

Jerry Lee
121 South Jackson Street
Moscow ID 83843
Telephone #: (208) 882-7858
Fax #: (208) 883-3785
E-mail: office@tgenviro.com
munkersj@tgenviro.com

26.3 Contractor Project Manager. The Contractor Project Manager identified below will manage the day-to-day project activities on behalf of the Contractor:

The Contractor Project Manager for this contract is:

Jerry Lee
121 South Jackson Street
Moscow ID 83843
Telephone #: (208) 882-7858
Fax #: (208) 883-3785
E-mail: office@tgenviro.com
munkersj@tgenviro.com

27. MEETINGS

The Contractor is required to meet with the State's personnel, or designated representatives, to resolve technical or contractual problems that may occur during the term of the contract or to discuss the progress

made by Contractor and the State in the performance of their respective obligations, at no additional cost to the State. Meetings will occur as problems arise and will be coordinated by the State. The Contractor will be given a minimum of three full working days notice of meeting date, time, and location. Face-to-face meetings are desired. However, at the Contractor's option and expense, a conference call meeting may be substituted. Consistent failure to participate in problem resolution meetings two consecutive missed or rescheduled meetings, or to make a good faith effort to resolve problems, may result in termination of the contract.

28. CONTRACTOR PERFORMANCE ASSESSMENTS

The State may do assessments of the Contractor's performance. This contract may be terminated for one or more poor performance assessments. Contractors will have the opportunity to respond to poor performance assessments. The State will make any final decision to terminate this contract based on the assessment and any related information, the Contractor's response and the severity of any negative performance assessment. The Contractor will be notified with a justification of contract termination. Performance assessments may be considered in future solicitations.

29. TRANSITION ASSISTANCE

If this contract is not renewed at the end of this term, or is terminated prior to the completion of a project, or if the work on a project is terminated, for any reason, the Contractor must provide for a reasonable period of time after the expiration or termination of this project or contract, all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to the State or its designees. Such transition assistance will be deemed by the parties to be governed by the terms and conditions of this contract, except for those terms or conditions that do not reasonably apply to such transition assistance. The State shall pay the Contractor for any resources utilized in performing such transition assistance at the most current rates provided by the contract. If there are no established contract rates, then the rate shall be mutually agreed upon. If the State terminates a project or this contract for cause, then the State will be entitled to offset the cost of paying the Contractor for the additional resources the Contractor utilized in providing transition assistance with any damages the State may have otherwise accrued as a result of said termination.

30. CHOICE OF LAW AND VENUE

This contract is governed by the laws of Montana. The parties agree that any litigation concerning this bid, proposal or subsequent contract must be brought in the First Judicial District in and for the County of Lewis and Clark, State of Montana and each party shall pay its own costs and attorney fees. (See Mont. Code Ann. § 18-1-401.)

31. SCOPE, AMENDMENT AND INTERPRETATION

31.1 Contract. This contract consists of 11 numbered pages, any Attachments as required, RFP # SPB05-894P**,** as amended and the Contractor's RFP response as amended. In the case of dispute or ambiguity about the minimum levels of performance by the Contractor the order of precedence of document interpretation is in the same order.

31.2 Entire Agreement. These documents contain the entire agreement of the parties. Any enlargement, alteration or modification requires a written amendment signed by both parties.

32. EXECUTION

The parties through their authorized agents have executed this contract on the dates set out below.

DEPARTMENT OF ADMINISTRATION
STATE PROCUREMENT BUREAU
PO BOX 200135
HELENA MT 59620-0135

BY:_____
Penny Moon, Contracts Officer

BY:_____
(Signature)

DATE:_____

TERRAGRAPHICS ENVIRONMENTAL ENGINEERING, INC.
121 S. JACKSON
MOSCOW ID 83843
FEDERAL ID # 82-0395020

BY:_____
(Name/Title)

BY:_____
(Signature)

DATE:_____

ATTACHMENT A
CONTRACTOR'S RESPONSE

4.1.2 Company Profile and Experience

TerraGraphics Environmental Engineering (TerraGraphics) was founded in 1984, as a majority woman owned consulting firm offering specialized environmental services. We have a core staff of 40 individuals serving clients throughout the Northwest. We have completed hundreds of projects in the areas of water chemistry/quality monitoring, site investigations, engineering design, solid and hazardous waste engineering, environmental impact studies, regulatory compliance, watershed restoration, and infrastructure/re-development throughout the northwest. We have completed this work for private clients and state, local, tribal, and federal government agencies. Our Project Manager, Mr. Jerry Lee, Principal, has more than 17 years of experience in the field of environmental science, water quality, GIS, and database systems. He can be reached at 121 South Jackson Street, Moscow, Idaho 83843, (208) 882-7858.

TerraGraphics recognizes that approaching today's environmental investigations requires coordinating a variety of disciplines and expertise as well as looking to the future to ensure that these projects incorporate the science necessary to meet the big picture requirements of stakeholders. Our approach to multidisciplinary projects is to assemble teams of specially qualified individuals from among our staff, consultants, or subcontractors that are tailored to each client's needs. TerraGraphics has a long history of working with State Governments, and is currently Idaho Department of Environmental Quality's Scientific Services Consultant for the Bunker Hill Superfund Site. We have a great deal of experience meeting the needs of State contracting, task orders, deliverables, etc. TerraGraphics offers a broad perspective to problem solving and provides our clients access to specialized services at very competitive rates.

TerraGraphics' projects vary in size from single property assessments to large Superfund project oversight and technical assistance. TerraGraphics has used GIS and database services to maintain environmental and human health data for the past 20-years. Through the integration of Geographic Information Systems (GIS), we successfully merge environmental science and engineering to bring about realistic solutions to complex environmental problems while integrating the needs of the community. We have developed particular in-house expertise in the following areas:

- Environmental Sampling/Monitoring
- Watershed & Stream Restoration
- Brownfields Pilot Assessments
- Environmental Site Assessments
- Engineering Construction Oversight
- Geographic Information Systems (GIS)
- Database Management
- Project Engineering and Design
- Human Health Risk Assessment Systems
- Air Quality Management
- Solid Waste Management
- Hazardous Waste Management/Remediation
- Pollution Prevention
- Public Education
- Grant Application Assistance
- Web-Based Information

TerraGraphics has the experience, people and solutions-oriented philosophy to assure your project's success. We stand behind our work and emphasize a quality of service that affords our clients the comfort of knowing their project goals will be met.

4.1.3 Method of Providing Services & Quality Assurance

TerraGraphics uses both Microsoft Access and SQL Server to maintain a great deal of environmental data. The databases containing potentially confidential data are protected by multiple levels of security at the Web database and programmatic levels. They are protected by logon and password. TerraGraphics can design a graphical user interface in Microsoft's Active Server Pages to enable data entry to be simplistic and easy to use. The databases can contain multiple cross-linked tables that logically and concisely store information gathered from a variety of sources. Information can be linked and made available on the Web with access being controlled as needed. We implement an automated proofing routine to ensure data quality by checking for inconsistencies across database tables and fields.

TerraGraphics has some of the best and brightest database programmers who have not only expertise in computer science, but with environmental science as well. An example of this cross education is Vamshi Venapally. Mr. Venapally has a degree in Mining Engineering and a M.S. in Computer Science. TerraGraphics believes this cross-pollination is essential to communication and ensuring that data is maintained and presented in a way best usable for our client.

TerraGraphics has written dozens of sampling and analysis plans and quality assurance project plans that had been approved by federal, state, and local agencies, including EPA, IDEQ, U.S. Forest Service, U.S. Fish and Game, U.S. Army Corps of Engineers, various tribal governments, etc. An example of a quality assurance project plan is included in Appendix B. An essential element in the QAPP is the compatibility and data quality objectives for inputting, managing, storing, and presenting the environmental and human health data collected. TerraGraphics maintains a number of data validation procedures to ensure that the quality of the data entering the database. Please refer to Appendix B for an example of our Quality Assurance Project Plan.

4.1.4 Staff Qualifications

Brief biographies for key personnel are presented below. Complete TerraGraphics staff resumes and Key Personnel Description Chart are included in Appendix A.

Project Manager – Jerry Lee, M.S., B.S. Mr. Lee earned a B.S. in Environmental Science and General Agriculture and a M.S. in Environmental Science. His primary responsibilities at TerraGraphics include oversight of all site characterization activities, including sampling and monitoring; Phase I, II, and III Environmental Site Assessments (ESAs); Risk-Based Corrective Action (RBCA) modeling; personnel tracking; budget planning/tracking; and client relations. Jerry Lee has been coordinating efforts for the 21 square mile water quality assessment program for the Bunker Hill superfund site for the last 14 years. Other key responsibilities include integrating environmental and engineering components of sites to maximize future redevelopment options, and presenting scientific project information to the public. Mr. Lee also oversees data Quality Assurance/Quality Control (QA/QC), health & safety, training, remedial efforts at hazardous waste sites, and the writing of permit applications. For the past 10 years, he has been the Administrative Project Manager for the TerraGraphics Bunker Hill Superfund Site activities.

Exposure/Risk Assessment Expert and Database Manager - Susan Spalinger, M.S., B.S. (Lead Technician) Ms. Spalinger will provide technical support when necessary. Ms. Spalinger has been managing the State's Idaho's largest environmental and health relational database for the Bunker Hill and Coeur d'Alene Basin Superfund Sites for over 4 years and has been analyzing the data for all environmental health reports for over 5 years. Confidentiality is the number one priority of the database and strict confidentiality processes have been established and are followed.

Database Administrator - Vamshi K. Venapally, M.S., B.E.
Mr. Venapally is TerraGraphic's database administrator. His expertise is in database management systems, advanced Web programming, intrusion detection systems, software specification, software engineering measurement and operating systems. Mr. Venapally has considerable experience in managing and working with environmental and remediation databases. He recently designed and implemented a comprehensive relational database management system for the Coeur d'Alene River Basin Sampling project at TerraGraphics. Currently he is leading a team to design and implement a comprehensive database for the Panhandle Health District's Institutional Control Program (ICP). This database will integrate all the environmental sampling and remedial action information since 1996 for all the properties in the Bunker Hill Superfund Site (BHSS). This will be the one of the largest environmental database ever maintained for at a Superfund Site. Mr. Venapally has experience with C, C++, VC++, Java, Perl, PHP, JavaScript, Pascal, Fortran, Lisp, and Prolog. He has dealt with Windows (NT, 2000, XP), R.H. Linux 7.2, and HP-Unix 10.20 operating systems. Other areas of expertise include SQL Server 2000, ASP, XML, J2EE, JDBC, EJB, XSLT Transformations, S-Plus, Verilog HDL, familiar with Web Services, Ontologies, XPath, Apache web server, Tripwire and Snort .

Hydraulic Engineer - Susan Firor, E.I.T., M.S., B.S.
Ms. Firor is an engineering hydrologist for TerraGraphics Environmental Engineering. She has Bachelor's and Master's degrees in Environmental Engineering. She has six years of experience modeling river hydraulics and

fish kinetics. Since 1998 Susan has been the lead software developer and engineer for the FishXing model, a US Forest Service computer program used in the assessment and design of culverts and other in-stream structures for fish passage. The model uses an extensive database to predict how fish may react to design elements. Her research interests include fish passage issues, fluvial geomorphology, hydraulic and hydrologic modeling. She is experienced in stream restoration engineering, engineering design, wetland delineation and engineering, hydrology, hydraulic and geomorphic design of fish passage structures, assessment and analysis of roads and culverts, water quality monitoring, data analysis, and database management systems. In addition, she taught courses in data analysis at the college level for Humboldt State University.

Engineer – Erik Ryan, E.I.T., M.S., B.S. Mr. Ryan is an environmental engineer for TerraGraphics Environmental Engineering and would be lead designer for the project team. He is experienced in stream restoration engineering, natural river channel analysis and design, geomorphology, environmental engineering, Geographical Information System (GIS), Global Positioning System (GPS), engineering design, and hydrology. Mr. Ryan has performed design and construction engineering on multiple stream restoration projects for TerraGraphics. In this capacity, he was responsible for surveying, collecting the information necessary for HEC-RAS and MIKE 11 modeling, performing GIS analysis, and directing construction. Mr. Ryan is familiar with the Haestad modeling products. He also assured that sediment and erosion control programs were implemented during river restoration activities to maintain minimum water quality standards, performed best management practices (BMPs), and utilized construction techniques to minimize impacts on the local area. Finally, Mr. Ryan has specialized training in steam and wetland development and hydrology.

Environmental Scientist – Jon Munkers, M.S., B.S. Mr. Munkers has a B.S. in Chemistry and Human Biology and a M.S. in Environmental Science with a focus on environmental assessment and characterization. Mr. Munkers has performed numerous large environmental site assessments and characterizations, including: Morning Mine Waste Pile Characterization, L.P. Mill Site Characterization, Colville Confederated Tribes Agency Campus Brownfields Assessment, Colville Confederated Tribes Reservation Assessment, and many other Phase I and II Environmental Site Assessments throughout the Northwest. Mr. Munkers is familiar with a variety of field test equipment, analytical protocols, QA/QC, and reporting methods. In addition, he has written a number of federal grants that were selected for funding from agencies such as HUD and EPA, totaling over $500,000 in 2003. Mr. Munkers has also conducted a number of public meetings and led round-table discussions at major conferences, most recently at the National Brownfields Conference in Portland, OR, at which there were over 4000 attendees.

GIS/Cartography - Benjamin Bailey, B.S. Mr. Bailey is the GIS Services Director for TerraGraphics Environmental Engineering. Mr. Bailey's primary responsibilities include production of materials for civil engineering support, maintenance and updating of spatial and tabular data, hiring and supervising of graphics personnel, maintenance of map library and data archives, production of graphical materials for presentations, and ensuring the overall quality and efficiency of GIS materials and equipment. Mr. Bailey's other responsibilities include the production of maps for environmental site assessments and other small projects. He also performs AutoCAD drafting for engineering projects. Mr. Bailey is skilled with the use of Global Positioning System (GPS) receivers and software, and is often called upon to perform surveys in the field.

IS Manager - Laurie Hickey, B.S.
Ms. Hickey is the IS Manager at TerraGraphics Environmental Engineering. She has a B.S. in Computer Engineering and minors in Mathematics and Environmental Science and Regional Planning. Her expertise is in software specification, software planning and design, Web page design and programming, network administration, computer programming, and MS Office. She has been the Web master for a variety of Web pages, including Basin Environmental Improvement Commission.

Database Specialist - Dena Marchant, B.S. Ms. Marchant is a database specialist for TerraGraphics Environmental Engineering. Her expertise is in database design and Web application development. As a Web programmer with more than nine years experience developing database-driven Web sites and applications, she has a strong background in MSSQL database design and maintenance, ASP, T-SQL and VBScript. She has possesses a thorough knowledge of usability issues and best practices and has experience in project management. Ms. Marchant has a bachelor's degree in Range Management.

Database Technician – Jonathon L. Manley, B.S. Mr. Manley is a database technician with TerraGraphics Environmental Engineering. He has a B.S. in Mechanical Engineering Technology and is currently in the process of completing his Master's in Urban and Regional Planning, with an emphasis in Environmental Planning. While attaining his Master's degree, he has been completing the requirements to become GIS certified. His expertise includes AutoCAD 2000, Arcview 3.2, Arc/INFO, MS Office Suite, project planning and demographic analysis. In addition, he has experience in facilitating community participation in development projects.

Engineer– Ryan Kobbe, E.I.T., B.S. Mr. Kobbe is an engineer for TerraGraphics Environmental Engineering. Has has a B.S. in Architectural Engineering and is currently pursuing his M.S. in Civil Engineering. He has been involved with the Coeur d'Alene Basin Cleanup and Repository Selection projects conducting survey grade GPS surveys, plot plans, maps and engineering plans from survey data. This work includes investigating site feasibility and optimization through the use of AutoCAD Land Development software.

4.1.2 Company Profile and Experience

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4.1.3 Method of Providing Services & Quality Assurance

TerraGraphics believes that client and stakeholder communication is essential to the success of any project. TerraGraphics employees are accessible to our clients at all times. Communication will be face-to-face, by telephone, fax, e-mail, and TerraGraphics' new interactive Web site (www.tgenviro.com) that allows password entrance by Montana state's project representatives who can check progress, compliance, monitoring results, project budgets and other information identified. Design drawings and other large documents will be posted on the secure Web site for real time exchange.

TerraGraphics has a number of different procedures in place to ensure QA/QC of our GIS and mapping service. Examples of QA/QC procedures range from double blind entry to ground truthing. TerraGraphics takes advantage of the latest software, hardware, technology, and training to provide the best, most accurate, and graphically sophisticated products available. TerraGraphics' name is derived from using GIS at its infancy over 20 years ago. We were one of the first companies to use GIS to link contamination with human health data.

Quality Assurance/Quality Control is important to TerraGraphics. We have a written procedure for technical and editorial review, approval by the Task Management and concurrence from the Project Manager. Editors and third party technical staff are available to support this program. TerraGraphics has written dozens of sampling and analysis plans and quality assurance project plans that had been approved by federal, state, and local agencies, including EPA, IDEQ, U.S. Forest Service, U.S. Fish and Game, U.S. Army Corps of Engineers, various tribal governments, etc. TerraGraphics' QAPP includes all the data quality objectives (DQOs) for the project to ensure that the data collected is of sufficient quality to meet the objectives and needs of the agencies and decision makers. Please refer to Appendix B for an example of our Quality Assurance Project Plan.

4.1.4 Staff Qualifications

Brief biographies for key personnel who would be working on the assigned project can be found below. Complete TerraGraphics staff resumes and Key Personnel Description Chart are included in Appendix A.

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network administration, computer programming, and MS Office. She has been the Web master for a variety of Web pages, including Basin Environmental Improvement Commission.

CAD Drafter - Roger Johnson Mr. Johnson is a CAD Drafter for TerraGraphics Environmental Engineering. His expertise is in computer drafting, site planning and evaluation, and site surveying. He has experience serving a a quality control manager, paralegal/contract manager and material estimator.

CAD Drafter – Brandi Rollins Ms. Rollins is a CAD Drafter for TerraGraphics Environmental Engineering. She has an
A.A.S. in Civil Drafting/Design and is currently pursuing her GIS certification. Her expertise is in AutoCad/LDD, ArcGIS, MS Access, MS Excel and MS Word.

Database Specialist - Dena Marchant, B.S. Ms. Marchant is a database specialist for TerraGraphics Environmental Engineering. Her expertise is in database design and Web application development. As a Web programmer with more than nine years experience developing database-driven Web sites and applications, she has a strong background in MSSQL database design and maintenance, ASP, T-SQL and VBScript. She has possesses a thorough knowledge of usability issues and best practices and has experience in project management. Ms. Marchant has a bachelor's degree in Range Management.

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Engineering– Ryan Kobbe, E.I.T., B.S. Mr. Kobbe is an engineer for TerraGraphics Environmental Engineering. He has a B.S. in Architectural Engineering and is currently pursuing his M.S. in Civil Engineering. He has been involved with the Coeur d'Alene Basin Cleanup and Repository Siting projects conducting survey grade GPS surveys, plot plans, maps and engineering plans from survey data. This work includes investigating site feasibility and optimization through the use of AutoCAD Land Development software.

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- Web-Based Information Systems

TerraGraphics has the experience, people and solutions-oriented philosophy to assure your project's success. We stand behind our work and emphasize a quality of service that affords our clients the comfort of knowing their project goals will be met.

TerraGraphics maintains a professional staff at the PhD, M.S., and B.S. level. 100% of the professional staff being presented for this proposal have bachelors degrees or higher, most are master level scientists and engineers. In addition to our core technical staff, we have assembled two well-known and respected PhD level water quality professionals: Dr. Mike Falter and Dr. Dale Ralston. Both have over 30-years of experience with water quality issues throughout the region. Dr. Falter has is a well known limnologist and water quality specialist and recently assisted with the determination of nutrient criteria for the Clark Fork River. Please see their attached resumes for further information on their expertise.

TerraGraphics has 20-years of experience working on water quality and monitoring projects. We take a holistic approach towards our projects from the initial sampling and assessment through the data analysis, modeling, engineering design, and construction oversight. TerraGraphics has worked to complete a variety of stream assessments and restoration projects where cross-sections, thalweg profiles, bathymetry, temperature, substrate size, redd counts, stream reach assessments, photo points, Rosgen Level II analysis and GIS have been used to assess the success of reclamation of riparian habitats and return or improve the physical characteristics of a stream. In addition, Susan Firor has been the lead programming Engineer in the development of FishXing © software for the U.S. Forest Service. The software assists with ensuring culverts are designed in a way to allow adequate conditions for fish passage.

TerraGraphics employees have a broad range of sampling experience ranging from anaerobic microbial sediment core sampling on mine waste ponds above the artic circle to cross sectional GIS depth integrated sampling on the Salmon River. TerraGraphics is familiar with the latest technology and sampling methodologies.

An example of a recent TerraGraphics project is the recently awarded contract from the Idaho Department of Environmental Quality to perform water sampling on the Spokane River as part of the State of Idaho's work to address TMDL issues. The sampling that is taking place in the Spokane River and outlet of Coeur d'Alene Lake will be used in TMDL modeling applications.

4.1.3 Method of Providing Services & Quality Assurance

TerraGraphics believes that client and stakeholder communication is essential to the success of any project. TerraGraphics employees are accessible to our clients at all times. Communication will be face-to-face, by telephone, fax, e-mail, and TerraGraphics' new interactive Web site (www.tgenviro.com) that allows password entrance by Montana state's project representatives who can check progress, compliance, monitoring results, project budgets and other information identified. Design drawings and other large documents will be posted on

the secure Web site for real time exchange.

Quality Assurance/Quality Control is important to TerraGraphics. We have a written procedure for technical and editorial review, approval by the Task Management and concurrence from the Project Manager. Editors and third party technical staff are available to support this program.

TerraGraphics has written dozens of sampling and analysis plans and quality assurance project plans that had been approved by federal, state, and local agencies, including EPA, IDEQ, U.S. Forest Service, U.S. Fish and Game, U.S. Army Corps of Engineers, various tribal governments, etc.

TerraGraphics' QAPP includes all the data quality objectives (DQOs) for the project to ensure that the data collected is of sufficient quality to meet the objectives and needs of the agencies and decision makers. We have included a QAPP written for the Site Wide Monitoring Program at Bunker Hill Superfund Site in Appendix B for reference.

4.1.4 Staff Qualifications

Brief biographies for key personnel are presented below. Complete TerraGraphics staff resumes and Key Personnel Description Chart are included in Appendix A.

Project Manager – Jerry Lee, M.S., B.S. Mr. Lee earned a B.S. in Environmental Science and General Agriculture and a M.S. in Environmental Science. His primary responsibilities at TerraGraphics include oversight of all site characterization activities, including sampling and monitoring; Phase I, II, and III Environmental Site Assessments (ESAs); Risk-Based Corrective Action (RBCA) modeling; personnel tracking; budget planning/tracking; and client relations. Jerry Lee has been coordinating efforts for the 21 square mile water quality assessment program for the Bunker Hill superfund site for the last 14 years. Other key responsibilities include integrating environmental and engineering components of sites to maximize future redevelopment options, and presenting scientific project information to the public. Mr. Lee also oversees data Quality Assurance/Quality Control (QA/QC), health & safety, training, remedial efforts at hazardous waste sites, and the writing of permit applications. For the past 10 years, he has been the Administrative Project Manager for the TerraGraphics Bunker Hill Superfund Site activities.

Environmental Scientist – Jon Munkers, M.S., B.S. (Lead Technician) Mr. Munkers has a B.S. in Chemistry and Human Biology and a M.S. in Environmental Science with a focus on environmental assessment and characterization. Mr. Munkers has performed numerous large environmental site assessments and characterizations, including: Morning Mine Waste Pile Characterization, L.P. Mill Site Characterization, Colville Confederated Tribes Agency Campus Brownfields Assessment, Colville Confederated Tribes Reservation Assessment, and many other Phase I and II Environmental Site Assessments throughout the Northwest. Mr. Munkers is familiar with a variety of field test equipment, analytical protocols, QA/QC, and reporting methods. In addition, he has written a number of federal grants that were selected for funding from agencies such as HUD and EPA, totaling over $500,000 in 2003. Mr.

Munkers has also conducted a number of public meetings and led round-table discussions at major conferences, most recently at the National Brownfields Conference in Portland, OR, at which there were over 4000 attendees.

Aquatic Ecologist - Dr. Michael Falter Dr. Falter is an aquatic ecology specialist and proposed expert Senior Scientist. His expertise with wetland and aquatic plant species and habitats throughout the northwest is unsurpassed. He has designed and managed more than 100 limnological projects on lakes, streams, and reservoirs of the United States, Africa, and Australia from 1969-2003. These projects, conducted for a variety of federal, State, regional, Tribal, and private entities, detailed aquatic ecology, assessed sediment and nutrient loading, and designed management plans for long-range optimization of water body uses. Dr. Falter has authored dozens of publications on lake and stream water quality issues, including Nutrient Loading Targets on the Clark Fork River, Montana-Idaho, Tri-State Implementation Council, December 2000.

Hydrologist (Ph.D./Civil Eng.) - Dr. Dale Ralston, P.E., P.G.

Dr. Ralston is a consultant for TerraGraphics Environmental Engineering, Inc. He has a

B.S. in Civil Engineering, a M.S. in Hydrology, and a Ph.D. in Civil Engineering. Dr. Ralston has worked for and with a variety of agencies, including: California Department of Water Resources, U.S. Geological Survey, Idaho Department of Water Administration, Idaho Bureau of Mines and Geology, University of Idaho, and most recently as President of Ralston Hydrologic Services, Inc. He has taught graduate level courses such as Hydrogeology, Well Hydraulics, Ground Water Management, Ground Water Remediation, and Field Techniques in Ground Water. In addition, Dr. Ralston has authored over 100 reports and papers, a number of which pertain to related research and projects in the Coeur d'Alene Reservation area. Dr. Ralston is a well-respected and well-known expert in north Idaho and western Montana hydrology.

Geologist - Lisa Hall, **M.S. Ms. Hall** is resident coordinator of QA/QC and ensures project specific data quality objectives are being met. She is experienced in all phases of soil, dust, surface and groundwater sampling for heavy metals and organics. She was a surveyor for the Panhandle Health District Lead Health Intervention Program for four summers and was a member of the field sampling team during the 1996 Coeur d'Alene River Basin Environmental Health Exposure Assessment. She also supervised and coordinated large-scale field activities during summer sampling events in the Coeur d'Alene Basin.

River Engineer – Erik Ryan, E.I.T., M.S., B.S. Mr. Ryan is an environmental engineer for TerraGraphics Environmental Engineering and would be lead designer for the project team. He is experienced in stream restoration engineering, natural river channel analysis and design, geomorphology, environmental engineering, Geographical Information System (GIS), Global Positioning System (GPS), engineering design, and hydrology. Mr. Ryan has performed design and construction engineering on multiple stream restoration projects for TerraGraphics. In this capacity, he was responsible for surveying, collecting the information necessary for HEC-RAS and MIKE 11 modeling, performing GIS analysis, and directing construction. Mr. Ryan is familiar with the Haestad modeling products. He also assured that sediment and erosion control programs were implemented during river restoration activities to maintain minimum water quality standards, performed best management practices (BMPs), and utilized construction techniques to minimize impacts on the local area. Finally, Mr. Ryan has specialized training in steam and wetland development and hydrology.

Hydraulic Engineer - Susan Firor, E.I.T., M.S., B.S. Ms. Firor is an engineering hydrologist for TerraGraphics Environmental Engineering. She has Bachelor's and Master's degrees in Environmental Engineering. She has six years of experience modeling river hydraulics and fish kinetics. Since 1998 Susan has been the lead developer and engineer for the FishXing model, a US Forest Service computer program used in the assessment and design of culverts and other in-stream structures for fish passage. Her research interests include fish passage issues, fluvial geomorphology, hydraulic and hydrologic modeling. She is experienced in stream restoration engineering, engineering design, wetland delineation and engineering, hydrology, hydraulic and geomorphic design of fish passage structures, assessment and analysis of roads and culverts, water quality monitoring, data analysis, and database management systems. In addition, she has completed Basic Wetland Delineation training and has taught courses in hydrology, hydraulics and environmental engineering at the college level at Humboldt State University.

Environmental Scientist - Michael Pereira, B.S. Mr. Pereira is an Environmental Scientist for TerraGraphics Environmental Engineering. He has a B.S. in Environmental Science from the University of Idaho. He specializes in project management, QA/QC analysis and Phase I ESAs. He is the site manager for the Coeur d'Alene river Basin sampling project as well as the site manger for the Bunker Hill Superfund Site closure project. At the height of these projects, he is in charge of supervising up to as many as 40 people, planning and coordinating daily tasks, training, data management and public relations with government, state and local officials. His field experience includes field project plans, plot plans, data collection, terrestrial sampling, aquatic sampling, data logger operation, field AQ/QC, and GPS systems.

Hydrogeologist – Alyssa Douglas, M.S., B.S. Ms. Douglas is a Hydrogeologist for TerraGraphics Environmental Engineering. She has a B.S. in Environmental Science with a minor in Chemistry and a M.S. degree in Hydrogeology focusing on ground water quality and quantity. She has been involved in projects throughout Idaho focusing on water quality and quantity conditions. Ms. Douglas has a strong background in the assessment of geochemical water quality conditions. She recently correlated ground water geochemical evolution with radiocarbon age dates to determine residence times in the Palouse Ground Water Basin. In addition, Ms. Douglas is skilled in a variety of water sampling methodologies and modeling applications. She

has performed stream monitoring and assessment of stream habitats for determination of water quality conditions of Idaho streams for the Idaho Department of Environmental Quality. Ms Douglas is also knowledgeable about water sampling techniques for bacteria, algae, metals and nutrients.

Environmental Scientist – Shawn Ringo, B.S. Mr. Ringo has a B.S. in Water Quality from Washington State University. He also has a strong background in limited/difficult access sampling. During his past employment with Geo-Tech explorations of Tualitin, Oregon, Mr. Ringo gained experience in drilling, sampling, and installing wells and instrumentation in a myriad of industrial settings to monitor for an equally diverse assortments of constituents of concern. He has experience drilling throughout the Pacific Northwest and is familiar with the optimal drilling and sampling technologies for the region's varied lithology. His field experience includes site investigations ranging from Trojan Nuclear Reactor near St. Helens, Oregon to contamination spread by cow dipping (pesticide application) in central Oregon to groundwater contamination from a wood treatment facility on Idaho's Rathdrum Prairie.

Environmental Scientist - Meghan Wilson, B.S. Ms. Wilson is an Environmental Scientist with TerraGraphics. She has a BS in Environmental Science and is working on a MS in Environmental Management. She has evaluated the effectiveness of various revegetation strategies at abandoned gold mine sites across Montana. Ms. Wilson also has experience in grant writing as well as experience in research, Quality Assurance/Quality Control (QA/QC) protocol, data analysis and entry including the production of technical material and reports

Environmental Technician - Christina Johnson, B.S. Ms. Johnson is an Environmental Technician with TerraGraphics. She has a Bachelor's degree in Geological Sciences with a concentration in Geomorphology. She has experience with Phase I Environmental Site Assessment (ESA) characterization and reports and Phase II ESA sample collection. She also worked on the Bunker Hill Superfund Site (Box) House Dust Data Summary Report and the Coeur d'Alene Basin Sampling Event QA/QC reports. In addition, she used MapInfo to produce plot plans, site maps, and land parcel maps. In addition, Ms. Johnson has experience creating cost sheets, analysis forms, supervising environmental site clean-up, and creating a forest landfill inventory including geo-referenced site location, information, and photo-documentation using ArcView.